

## IN THE CLAIMS

35. (Currently Amended) An apparatus, comprising:  
means for storing a plurality of content records;  
means for accessing the content records;  
means for storing a persistent user-specific profile;  
means for relating content records with a stored user profile according to a likely degree of interest;  
means for presenting to the user the related content records;  
means for receiving a user feedback on said relation; and  
means for updating the user profile based on said the feedback.

36. (Previously Amended) The apparatus according to claim 35,  
wherein said apparatus is an information access system for automatically presenting users  
with information items of interest;

wherein said content records storing means comprises a computer system containing a  
database of information items available to be presented to users of the system;

wherein said accessing means comprises at least one access device for enabling users to  
communicate with the computer system and access any of the items of available information;

wherein said user profile storing means stores a user profile for each user having access  
to the available items of information;

wherein said relating means comprises means for ranking a likely degree of interest for  
each of the available items of information in accordance with a user profile;

wherein said presenting means presents the items of information to an access device in  
order of ranking and enabling a user to retrieve each item;

wherein said feedback receiving means comprises means for enabling the user to indicate  
that user's interest in each retrieved item of information; and

wherein said updating means comprises means for updating the user's profile in response  
to indications of interest provided by the user.

37. (Original) The apparatus of claim 36, wherein said ranking means ranks the available items of information for a user on the basis of at least one attribute pertaining to each item of information.

38. (Original) The apparatus of claim 37, wherein said attribute is the contents of the item of information.

39. (Original) The apparatus of claim 36, wherein said ranking means produces a formula which predicts the interest of a user in an item of information on the basis of at least one of a user profile and an attribute related to that item of information.

40. (Currently Amended) A method, comprising:  
storing a plurality of content records;  
storing a persistent user-specific profile;  
receiving a user request for content records;  
relating content records with a stored user profile according to a likely degree of interest;  
and  
presenting to the user the related content records.

41. (Previously Amended) The method according to claim 40, for providing information to users of a computer system, wherein:

said content record storing step comprises storing items of information in an unstructured database within the computer system;

said user profile storing step comprises determining and storing user profiles for users of the computer system who have access to the items of information;

said receiving a request step comprises receiving a request from a user for access to the stored information;

said relating step comprises determining a user's likely degree of interest in items of information stored in said database, in accordance with that user's profile, and ranking the items of information in accordance with their determined degrees of interest; and

said presenting step comprises displaying the items of information with an indication of their relative rankings.

42. (Original) The method of claim 41, wherein said items of information are displayed in order of their ranking.

43. (Original) The method of claim 41, wherein the user profiles and the determined degree of interest in items of information are based upon at least one attribute associated with each item of information.

44. (Original) The method of claim 43, wherein said attribute is the content of the item of information.

45. (Original) The method of claim 41, further including the steps of selecting an item of information from those which are displayed, providing an indication of the user's actual interest in the selected item of information, and storing the user's indicated interest.

46. (Original) The method of claim 41, wherein the likely degree of interest is determined for all of the items of information stored in said database in response to receipt of a user's request for access.

47. (Original) A method, comprising the steps of:  
automatically generating a user-specific profile representing an interest summary based on a history of access to objects; and  
persistently storing the user profile in memory.

48. (Previously Amended) The method of claim 47, for providing a user with access to selected ones of a plurality of target objects and sets of target object characteristics that are accessible via an electronic storage media, where said user is connected via user terminals and data communication connections to a target server system which accesses said electronic storage media, wherein:

said automatically generating step generates at least one user target profile interest summary for a user at a user terminal, each of said user target profile interest summary being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and

said storing step stores said at least one user target profile interest summary in a memory.

49. (Previously Amended) The method of claim 48, further comprising the steps of:  
enabling said user to access said plurality of target objects and sets of target object characteristics stored on said electronic storage media via said user target profile interest summaries;

said step of enabling access comprising:

correlating said user target profile interest summaries, generated for said user, with target profiles generated for said plurality of target objects and sets of target object characteristics to identify ones of said plurality of target objects and sets of target object characteristics stored on said electronic storage media that are likely to be of interest to said user;

transmitting a list, that identifies at least one of said identified ones of said plurality of target objects and sets of target object characteristics, to said user; and

providing access to a selected one of said plurality of target objects and sets of target object characteristics stored on said electronic storage media in response to said user selecting an item from said list;

said step of providing access further comprising:

transmitting data, in response to said user activating said user terminal to identify said selected item on said list, indicative of said user's selection of said selected item from said user terminal to said target server via a one of said data communication connections;

retrieving, in response to receipt of said data from said user terminal, a one of a target object and set of target object characteristics identified by said selected item from said electronic storage media; and

transmitting said retrieved one of said target object and set of target object characteristics to said user terminal for display thereon to said user,

said step of automatically generating comprising:

automatically updating said user target profile interest summary for said user as a function of said target objects and sets of target object characteristics retrieved by said user.

50. (Previously Amended) The method of claim 48, wherein said automatically generating step comprises:

- creating a customer profile, said customer profile indicating a respective customer's preferences for data;

- monitoring a history of data objects accessed by the customer; and

- automatically updating the customer profile in accordance with the content profiles accessed by the customer to automatically update the customer profile to represent the customer's preferences.

51. (Previously Amended) The method of claim 47, wherein said method is for scheduling customer access to data from a plurality of data sources,

- further comprising the steps of:

- creating content profiles for each data source of said data, said content profiles indicating a degree of content of predetermined characteristics in data from each data source;

- said generating step comprises creating at least one customer profile for each eligible recipient of said data, said customer profile indicating a customer's preferences for data having predetermined characteristics;

- monitoring which data sources are actually accessed by each recipient; and

- updating, without input from each customer, each customer profile in accordance with the content profiles of the data sources actually accessed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.

52. (Previously Amended) The method of claim 47, wherein said method is for scheduling customer access to video programs,

- further comprising the steps of:

- creating content profiles for each video program available for viewing, said content profiles indicating a degree of content of predetermined characteristics in each video program;

creating at least one customer profile for each customer of said video programs, said customer profile indicating a customer's preferences for predetermined characteristics of the video programs;

monitoring which video programs are actually viewed by each customer; and

updating, without input from each customer, each customer profile in accordance with the content profiles of the video programs actually viewed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.

53. (Original) The method of claim 52, comprising the further steps of receiving customer identity information and determining from said customer identity information which customer profile to update in said updating step.

54. (Previously Amended) The method of claim 47, wherein said method is for scheduling customer access to data from a plurality of data sources, further comprising the steps of:

creating a customer profile for each customer of said plurality of data sources, said customer profile indicating a customer's preferences for predetermined characteristics of the data sources;

monitoring which data sources are actually accessed by each customer; and

updating each customer profile to reflect a frequency of selection of the data sources by customers with customer profiles substantially similar to said each customer profile.

55. (Previously Amended) An apparatus, comprising:

means for automatically generating a user-specific profile representing an interest summary based on a history of access to objects; and

a memory for persistently storing the user profile.

56. (Previously Amended) The apparatus according to claim 55, for providing a user with access to selected ones of a plurality of target objects and sets of target object characteristics that are accessible via an electronic storage media, where said user is connected via user terminals

and data communication connections to a target server system which accesses said electronic storage media, comprising:

means for automatically generating at least one user target profile interest summary for a user at a user terminal, each of said user target profile interest summaries being indicative of ones of said target objects and sets of target object characteristics accessed by said user; and

means for storing said at least one user target profile interest summary in a memory.

57. (Original) The apparatus of claim 56, further comprising:

means for enabling said user to access said plurality of target objects and sets of target object characteristics stored on said electronic storage media via said user target profile interest summaries:

said means for enabling access comprising:

means for correlating said user target profile interest summaries, generated for said user, with target profiles generated for said plurality of target objects and sets of target object characteristics to identify ones of said plurality of target objects and sets of target object characteristics stored on said electronic storage media that are likely to be of interest to said user;

means for transmitting a list, that identifies at least one of said identified ones of said plurality of target objects and sets of target object characteristics, to said user; and

means for providing access to a selected one of said plurality of target objects and sets of target object characteristics stored on said electronic storage media in response to said user selecting an item from said list.

said means for providing access comprising:

means for transmitting data, in response to said user activating said user terminal to identify said selected item on said list, indicative of said user's selection of said selected item from said user terminal to said target server via a one of said data communication connections;

means for retrieving, in response to receipt of said data from said user terminal, a target object identified by said selected item from said electronic storage media; and

means for transmitting said retrieved target object to said user terminal for display thereon to said user;

said means for automatically generating comprising:

means for automatically updating said user target profile interest summary for said user as a function of said target objects and sets of target object characteristics retrieved by said user.

58. (Previously Amended) A system, comprising:

a persistent customer profile, said customer profile indicating a respective customer's preferences for data;

means for monitoring a history of data objects accessed by the customer; and

means for automatically updating the customer profile in accordance with content profiles accessed by the customer to automatically update the customer profile to represent the customer's preferences.

59. (Previously Amended) The system according to claim 58, for scheduling customer access to data from a plurality of data sources, further comprising:

content profiles for each data source of said data, said content profiles indicating a degree of content of predetermined characteristics in data from each data source;

wherein:

at least one customer profile for each eligible recipient of said data is provided, said customer profile indicating the customer's preferences for data having predetermined characteristics;

said monitoring means monitors which data sources are actually accessed by each recipient; and

said updating means updates, without input from each customer, each customer profile in accordance with the content profiles of the data sources actually accessed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.

60. (Original) The system according to claim 58, for scheduling customer access to video programs received from a video head end, further comprising:

content profiles for each video program available for viewing, said content profiles indicating a degree of content for predetermined characteristics in each video program;

wherein:



at least one customer profile for each customer of said video programs is provided, said customer profile indicating the customer's preferences for predetermined characteristics of the video programs;

said means for monitoring monitors which video programs are actually viewed by each customer; and

said means for updating updates, without input from each customer, each customer profile in accordance with the content profiles of the video programs actually viewed by that customer to automatically update each customer's actual preferences for said predetermined characteristics.

61. (Original) The system as in claim 60, further comprising:  
means for transmitting said content profiles to each customer along with electronic program guide data for upcoming television viewing periods.

62. (Original) The system as in claim 60, further comprising means for inputting customer identity information and for determining from said customer identity information which customer profile to update with said updating means.

63. (Previously Amended) The system according to claim 60, for scheduling customer access to data provided by a plurality of data sources, further comprising:

means for creating a customer profile for each customer of said plurality of data sources, said customer profile indicating said customer's preferences for predetermined characteristics of the data sources;

said monitoring means monitors which data sources are actually accessed by each customer; and

said updating means updates each customer profile to reflect a frequency of selection of the data sources by customers with customer profiles substantially similar to said each customer profile.

64. (Previously Amended) The system according to claim 58, being a multimedia terminal for receiving data from a plurality of data sources, further comprising:

means for storing at least one customer profile indicating a customer's preferences for data having predetermined characteristics;

means for storing content profiles for each data source of said data, said content profiles indicating a degree of content of said predetermined characteristics in data from each data source;

means for inputting recipient identity information;

means for selecting different customer profiles which correspond to said recipient identity information in accordance with the time of day and day of the week;

processing means for relating said selected customer profiles with the content profiles for the data available from each data source to the customer at a particular time and for determining a subset of data having content profiles which most closely match said selected customer profile; and

a display guide for presenting said subset of data to said customer for selection.

65. (Original) The system as in claim 64, further comprising means for storing an electronic program guide, wherein said display guide highlights programs within said electronic program guide which correspond to said subset of data.